



PCI

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/830,914C

DATE: 02/11/2003 TIME: 14:29:17

Input Set : A:\pf0621usn\_subseqlist.txt
Output Set: N:\CRF4\02112003\1830914C.raw

```
1 <110> APPLICANT: INCYTE GENOMIC, INC.; TANG, Y. Tom;
              CORLEY, Neil C.; GORGONE, Gina A.;
              GUEGLER, Karl J.; BAUGHN, Mariah R.
      5 <120> TITLE OF INVENTION: MYOSIN HEAVY CHAIN HOMOLOG
      7 <130> FILE REFERENCE: PF-0621 USN
      9 <140> CURRENT APPLICATION NUMBER: US 09/830,914C
C--> 10 <141> CURRENT FILING DATE: 2002-11-06
     12 <150> PRIOR APPLICATION NUMBER: PCT/US99/26177
     13 <151> PRIOR FILING DATE: 1999-11-05
     15 <150> PRIOR APPLICATION NUMBER: US 60/172,248
                                                                    ENTERED
     16 <151> PRIOR FILING DATE: 1998-11-05
     18 <160> NUMBER OF SEQ ID NOS: 4
     19 <170> SOFTWARE: PERL Program
     21 <210> SEQ ID NO: 1
     22 <211> LENGTH: 612
     23 <212> TYPE: PRT
     24 <213> ORGANISM: Homo sapiens
     26 <220> FEATURE:
     27 <221> NAME/KEY: misc_feature
     28 <223> OTHER INFORMATION: Incyte ID No: 1929760CD1
     30 <400> SEQUENCE: 1
     31 Met Phe Cys Pro Pro Gln Val Ser Cys Ser Leu Ser Leu Met Pro
                                                                  15
     32
          1
     33 Arg Leu Pro Ser Ile Arg His Trp Gln Gly Pro Ser His Pro Gly
                                             25
                         20
     35 Phe Leu Gly Pro Leu Phe Pro Ile Cys Ser Leu Gln Trp Pro His
     36
     37 Gly Phe Ser Ala Ile Phe Pro Gly Leu Leu Asp Val Tyr Gly Phe
     38
                                             55
     39 Glu Ser Phe Pro Asp Asn Ser Leu Glu Gln Leu Cys Ile Asn Tyr
     40
                         65
                                                                  75
     41 Ala Asn Glu Lys Leu Gln Gln His Phe Val Ala His Tyr Leu Arg
                                                                  90
                         80
                                             85
     43 Ala Gln Glu Glu Tyr Ala Val Glu Gly Leu Glu Trp Ser Phe
                         95
                                            100
     44
     45 Ile Asn Tyr Gln Asp Asn Gln Pro Cys Leu Asp Leu Ile Glu Gly
     46
                        110
                                            115
     47 Ser Pro Ile Ser Ile Cys Ser Leu Ile Asn Glu Glu Cys Arg Leu
                        125
                                            130
     48
     49 Asn Arg Pro Ser Ser Ala Arg Gln Leu Gln Thr Arg Ile Glu Thr
                        140
                                            145
     51 Ala Leu Ala Gly Ser Pro Cys Leu Gly His Asn Lys Leu Ser Arg
```

160

165

155

52

## RAW SEQUENCE LISTING DATE: 02/11/2003 PATENT APPLICATION: US/09/830,914C TIME: 14:29:17

| 53 Glu Pro Ser Phe Ile Val Val His Tyr Ala Gly Pro Val Arg Tyr |           |        |      |       |       |           |        |       |        |      |           |              |          |          |       |
|--|-----------|--------|------|-------|-------|-----------|--------|-------|--------|------|-----------|--------------|----------|----------|-------|
| 53   | Glu       | Pro    | Ser  | Phe   |       | Val       | Val    | His   | Tyr    |      | Gly       | Pro          | Val      | Arg      |       |
| 54   |           |        |      |       | 170   |           |        | _     | _      | 175  | _         | -            | - 3      | <b>n</b> | 180   |
|  | His       | Thr    | Ala  | GLy   |       | Val       | Glu    | Lys   | Asn    |      | Asp       | Pro          | ire      | Pro      |       |
| 56   | <b>01</b> | T      | m1   | 7     | 185   | T         | C1-    | C1-   | Com    | 190  | 7 020     | Dro          | T 011    | T 011    | 195   |
|  | Glu       | Leu    | Thr  | Arg   |       | ьeu       | GIN    | GIN   | ser    | 205  | ASP       | PIO          | ьeu      | ьеи      | 210   |
| 58   | C1        | T 0    | Dha  | Dwo   | 200   | 7 an      | Dro    | Two   | C1,1   |      | Thr       | Gln          | Clu      | Glu      |       |
|  | Gly       | ьец    | Pne  | PIO   | 215   | ASII      | PIO    | ъу    | GIU    | 220  | 1111      | GIII         | Gru      | Gru      | 225   |
| 60   | Pro       | Cl.v   | Cln  | Sor   |       | Δla       | Pro    | Val   | T.e.11 |      | Val       | Val          | Ser      | Lvs      |       |
| 62   | FIO       | дту    | GIII | Ser   | 230   | пта       | 110    | Val   | пси    | 235  | vai       | vul          | DCL      | цу       | 240   |
|  | Lys       | Δla    | Ser  | T.en  |       | Gln       | Len    | Leu   | Gln    |      | Leu       | His          | Ser      | Thr      |       |
| 64   | ביים      |        |      |       | 245   |           |        | _ •   |        | 250  |           |              |          |          | 255   |
|  | Pro       | His    | Tvr  | Ile   | Arg   | Cvs       | Ile    | Lys   | Pro    | Asn  | Ser       | Gln          | Gly      | Gln      | Ala   |
| 66   |           |        | 2    |       | 260   | -         |        | -     |        | 265  |           |              | _        |          | 270   |
| 67   | Gln       | Thr    | Phe  | Leu   | Gln   | Glu       | Glu    | Val   | Leu    | Ser  | Gln       | Leu          | Glu      | Ala      | Cys   |
| 68   |           |        |      |       | 275   |           |        |       |        | 280  |           |              |          |          | 285   |
| 69   | Gly       | Leu    | Val  | Glu   | Thr   | Ile       | His    | Ile   | Ser    | Ala  | Ala       | Gly          | Phe      | Pro      | Ile   |
| 70   |           |        |      |       | 290   |           |        |       |        | 295  |           |              |          |          | 300   |
| 71   | Arg       | Val    | Ser  | His   | Arg   | Asn       | Phe    | Val   | Glu    |      | Tyr       | Lys          | Leu      | Leu      |       |
| 72   |           |        |      |       | 305   |           |        | _     |        | 310  | _         | _            | _        | _        | 315   |
|  | Arg       | Leu    | His  | Pro   |       | Thr       | Ser    | Ser   | GLy    |      | Asp       | Ser          | Pro      | Tyr      |       |
| 74   |           | _      | ~ 1  | _     | 320   | <b>63</b> |        | ~     | ъ.     | 325  | 0         | <b>6</b> 3   | C1       | 70.7     | 330   |
|  | Ala       | Lys    | GLy  | Leu   |       | Glu       | Trp    | Cys   | Pro    | 340  | Ser       | GIU          | GIU      | Ala      | 345   |
| 76   | T         | C1     | Dwa  | Т о   | 335   | C1 ~      | 7) an  | т1.   | T 011  |      | Thr       | T 011        | Dro      | Val      |       |
| 78   | Leu       | GLU    | PIO  | ьеи   | 350   | GIII      | ASP    | TTG   | ьец    | 355  | 1111      | пеи          | FIO      | Val      | 360   |
|  | Thr       | Gln    | Δla  | Δla   |       | Tle       | Thr    | Glv   | Asp    |      | Ala       | Glu          | Ala      | Met      |       |
| 80   | #111      | OIII   | riiu | 711.4 | 365   | 110       | 1      | 011   | 110p   | 370  |           | 0_0          |          |          | 375   |
|  | Ala       | Pro    | Met  | His   |       | Glv       | Ara    | Thr   | Lys    |      | Phe       | Met          | Thr      | Asp      | Ser   |
| 82   |           |        |      |       | 380   | _         | _      |       | -      | 385  | ^         |              |          | -        | 390   |
| 83   | Met       | Leu    | Glu  | Leu   | Leu   | Glu       | Cys    | Gly   | Arg    | Ala  | Arg       | Val          | Leu      | Glu      | Gln   |
| 84   |           |        |      |       | 395   |           |        |       |        | 400  |           |              |          |          | 405   |
| 85   | Cys       | Ala    | Arg  | Cys   | Ile   | Gln       | Gly    | Gly   | Trp    | Arg  | Arg       | His          | Arg      | His      |       |
| 86   |           |        |      |       | 410   |           |        |       |        | 415  |           |              |          |          | 420   |
|  | Glu       | Gln    | Glu  | Arg   |       | Trp       | Arg    | Ala   | Val    |      | Leu       | Ile          | Gln      | Ala      |       |
| 88   |           | _      | _    | _     | 425   |           | _      | _     |        | 430  | <b>~1</b> | <b>7</b> 0 . | <b>T</b> | ***      | 435   |
|  | Ile       | Arg    | Ser  | Trp   |       | Thr       | Arg    | ьуs   | His    |      | GIn       | Arg          | Leu      | HIS      |       |
| 90   | 70.7 -    | 70.7 _ | ml   | v-1   | 440   | T         | 7\ ~~~ | 71.7  | T ww   | 445  | T         | Trn          | 71 200   | Tlo      | 450   |
|  | Ala       | Ala    | Thr  | vaı   |       | ьys       | Arg    | Ата   | rrp    | 460  | ьўѕ       | пр           | ALG      | TTE      | 465   |
| 92   | Met       | 717    | Cvc  | T 011 | 455   | Λla       | Luc    | Glu   | Lou    |      | Glv       | Val          | Glu      | Glu      |       |
| 94   | Met       | ALA    | Cys  | пеп   | 470   | Ата       | цуз    | Giu   | шеα    | 475  | OLy       | val          | OLU      | Olu      | 480   |
|  | His       | Phe    | Ser  | Gln   |       | Pro       | Cvs    | Ser   | Leu    |      | Thr       | Ser          | Pro      | Leu      |       |
| 96   | 1113      | 1110   | 501  | 0111  | 485   |           | 0,0    | 001   | 200    | 490  |           |              |          |          | 495   |
|  | Thr       | Ara    | Leu  | Leu   |       | Ala       | Ile    | Ile   | Ara    |      | Trp       | Pro          | Leu      | Gly      |       |
| 98   |           | 9      |      |       | 500   |           |        |       | 9      | 505  | 1         |              |          | -        | 510   |
|  | Val       | Leu    | Ala  | Asn   |       | Ala       | Met    | Gly   | Val    | Gly  | Ser       | Phe          | Gln      | Arg      | Lys   |
| 10   |           |        |      |       | 51    |           |        | -     |        | 52   |           |              |          |          | 525   |
| 10   | 1 Le      | ı Vai  | l Va | l Tr  | o Ala | a Cy:     | s Le   | اGL د | n Lei  | u Pr | o Ar      | g Gl         | y Se     | r Pro    | o Ser |

## RAW SEQUENCE LISTING DATE: 02/11/2003 PATENT APPLICATION: US/09/830,914C TIME: 14:29:17

```
530
                                        535
                                                             540
102
103 Ser Tyr Thr Val Gln Thr Ala Gln Asp Gln Ala Gly Val Thr Ser
                                        550
                    545
105 Ile Arg Ala Leu Pro Gln Gly Ser Ile Lys Phe His Cys Arg Lys
                    560
                                        565
                                                             570
106
107 Ser Pro Leu Arg Tyr Ala Asp Ile Cys Pro Glu Pro Ser Pro Tyr
                                                             585
                    575
                                        580
109 Ser Ile Thr Gly Phe Asn Gln Ile Leu Leu Glu Arg His Arg Leu
                                        595
                    590
110
111 Ile His Val Thr Ser Ser Ala Phe Thr Gly Leu Gly
                                        610
112
114 <210> SEQ ID NO: 2
115 <211> LENGTH: 2109
116 <212> TYPE: DNA
117 <213> ORGANISM: Homo sapiens
119 <220> FEATURE:
120 <221> NAME/KEY: misc feature
121 <223> OTHER INFORMATION: Incyte ID No: 1929760CB1
123 <400> SEQUENCE: 2
124 tgatgctctg ggctgtcttc acacttcatt tgggtttcct gcttgctctg agctctacag 60
125 gggaatgggg tagagatggg agccaccttg ggtggagggt ggggaaggta tgttctgccc 120
126 accacaggtg tcatgctcac tcagcctgat gcccaggctg ccaagtataa ggcattggca 180
127 ggggcccagc caccetgggt teettggtee cetatteece atetgeteee tgcagtggee 240
128 ccatgggttc tctgccatct tcccaggcct gctggatgtg tatggatttg aatcatttcc 300
129 tgacaacagt ctggaacagt tgtgcatcaa ctacgccaat gagaagctgc agcagcattt 360
130 tgtggctcac tacctaaggg cccagcagga ggaatacgca gttgagggcc tggagtggtc 420
131 attcatcaac taccaggaca accagccctg tttggatctc attgagggaa gccccatcag 480
132 catctgctcc ctcataaatg aggaatgccg cctcaatcga cccagcagcg cacgccagct 540
133 ccagacacgc attgagactg ccctggcagg cagcccctgc ctgggccaca ataagctcag 600
134 ccgggagccc agcttcattg tggtgcatta tgcggggcct gtgcggtacc acacagcagg 660
135 cctggtggag aagaacaagg accctatccc acctgagctg accaggctcc tgcagcaatc 720
136 ccaggaccc ctgctcatgg ggctgtttcc tactaacccc aaagagaaga cccaggagga 780
137 acccctggc cagagcaggg ccctgtgtt gaccgtggtg tccaagttca aggcctcact 840
138 ggagcagett etgeaggtee taeacageae eaegeeecae taeatteget geateaagee 900
139 caacagccag ggccaggcgc agacctttct ccaagaggag gtcctgagcc agctggaggc 960
140 ctgtggcctc gtggagacca tccatatcag tgctgctggc ttccccatcc gggtctctca 1020
141 ccgaaacttt gtagaacgat acaagttact aagaaggctt catccttgca catcctctgg 1080
142 ccccqacaqc ccatatcctq ccaaaqqqct ccctgaatgg tgtccacaca gcgaggaagc 1140
143 cacgettgaa ceteteatee aggacattet ceacactetg eeggteetaa eteaggeage 1200
144 agccataact ggtgactcgg ctgaggccat gccagccccc atgcactgtg gcaggaccaa 1260
145 ggtgttcatg actgactcta tgctggagct tctggaatgt gggcgtgccc gggtgctgga 1320
146 gcagtgtgcc cgctgcatcc agggtggctg gaggcgacac cggcaccgag agcaggagcg 1380
147 gcagtggcgg gccgtcatgc tcatccaggc agccattcgt tcctggttaa ctcggaaaca 1440
148 catccagagg ctgcatgcag ctgccacagt catcaagcgt gcatggcaga agtggagaat 1500
149 caqaatqqcc tqccttqctq ctaaaqaqct ggatggtgtg gaagaaaaac acttctctca 1560
150 agetecetgt teeetgagea eetegeeget geagaceagg eteetggagg caataateeg 1620
151 cctctggccc ctgggactgg tcctggccaa tacggctatg ggtgtaggca gctttcagag 1680
152 gaaattagtg gtctgggctt gcctccagct ccccaggggc agccccagta gctacactgt 1740
153 ccagacagca caagaccagg ctggtgtcac gtccatccga gcgctgcctc agggatcgat 1800
```

## RAW SEQUENCE LISTING DATE: 02/11/2003 PATENT APPLICATION: US/09/830,914C TIME: 14:29:17

```
154 aaagtttcac tgcagaaagt ctccactgcg gtatgctgac atctgccctg aaccttcacc 1860
155 ctacagcatt acaggettta atcagattet getggaaaga cacaggetga tecaegtgae 1920
156 ctcttctgcc ttcactgggc tggggtgatc cttggtgcct ttgtttccac aaggcctttt 1980
157 cctgcccct gccttgccaa agacatttaa tcagcacaca gctgccagac tattcccaca 2040
158 gtgctccaaa tgcacatgaa caacagtgac ggctccagcc ttcgacccag agccccgtgc 2100
159 ccaqtqcqt
161 <210> SEQ ID NO: 3
162 <211> LENGTH: 1839
163 <212> TYPE: PRT
164 <213> ORGANISM: Caenorhabditis elegans
166 <220> FEATURE:
167 <221> NAME/KEY: misc feature
168 <223> OTHER INFORMATION: GenBank ID No: g1279777
170 <400> SEQUENCE: 3
171 Met Phe Asn Tyr Ser Lys Ile Phe Gln Ile His Arg Ala Cys Ser
172
173 Pro Asn Arg Lys Lys Ile Gly Ser Ile Gln Tyr Gly Arg Arg Arg
                     20
                                          25
175 His Ser Trp Gln Gly Pro Val Val Pro Ala Ala Lys Leu Gln Val
                                          40
176
177 Leu Ile Lys Gly Val Arg Ile Trp His Arg His Pro Thr Leu Val
                     50
                                          55
179 Trp Ile Gly Ala Thr Leu Glu Glu Asp Ile Thr Phe Gln Thr Arg
                                          70
180
181 Asn Val Arg Ile Arg Leu Glu Asp Asp Thr Glu Val Glu Tyr Ala
182
183 Ile Lys Ser Leu Asp Gln Leu Pro Phe Leu Arg Asn Pro Ala Phe
                                         100
                     95
184
185 Leu Val Gly Lys Asp Asp Leu Thr Leu Leu Ser Tyr Leu His Glu
                                         115
                    110
187 Pro Ala Val Leu His Asn Leu Gln Val Arg Phe Val Lys Gly Ser
                                         130
                    125
188
189 Ser Ile Tyr Thr Tyr Cys Gly Ile Val Leu Val Ala Ile Asn Pro
                    140
                                         145
190
191 Tyr Ala Asp Cys Ser His Ile Tyr Gly Glu Glu Ile Ile Gln Val
                    155
                                         160
193 Tyr Arg Gly Ala Gly Lys Ser Ala Arg Glu Met Asp Pro His Ile
                    170
                                         175
195 Phe Ala Val Ala Glu Glu Ala His Phe Asp Met Gly Ala Phe Gly
                                         190
                    185
196
197 Lys Ser Gln Ser Ile Ile Val Ser Gly Glu Ser Gly Ala Gly Lys
                                                              210
                    200
198
199 Thr Val Ser Ala Lys Phe Val Met Arg Tyr Leu Ala Ser Val Ala
                    215
                                         220
201 Ala Ser Lys Thr Arg Asn Gly Gly Thr Thr Ser Ile Glu Ala Arg
                    230
                                         235
202
203 Val Leu Ala Ser Asn Pro Ile Met Glu Ser Ile Gly Asn Ala Lys
                    245
                                         250
205 Thr Ile Arg Asn Asp Asn Ser Ser Arg Phe Gly Lys Phe Ile Gln
```

DATE: 02/11/2003

## RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/830,914C TIME: 14:29:17

| 206 |       |          |                  |      | 260        |      |         |          |      | 265 |       |       |             |            | 270        |
|-----|-------|----------|------------------|------|------------|------|---------|----------|------|-----|-------|-------|-------------|------------|------------|
| 207 | Ile   | Asn      | Phe              | Cys  | Glu        | Arg  | Gly     | Arg      | Arg  | Ile | Val   | Gly   | Ala         | Glu        | Met        |
| 208 |       |          |                  |      | 275        |      |         |          |      | 280 |       |       |             |            | 285        |
| 209 | Lys   | Thr      | Tyr              | Leu  | Leu        | Glu  | Lys     | Ser      | Arg  | Leu | Val   | Phe   | Gln         | Ala        | Pro        |
| 210 |       |          |                  |      | 290        |      |         |          |      | 295 |       |       |             |            | 300        |
| 211 | Gly   | Glu      | Arg              | Asn  | Tyr        | His  | Ile     | Phe      | Tyr  | Gln | Leu   | Cys   | Ala         | Ala        | Arg        |
| 212 |       |          |                  |      | 305        |      |         |          |      | 310 |       |       |             |            | 315        |
| 213 | Asn   | His      | Gln              | Val  | Leu        | Lys  | Asp     | Leu      | His  | Leu | Gly   | Pro   | Cys         | Glu        | Ser        |
| 214 |       |          |                  |      | 320        |      |         |          |      | 325 |       |       |             |            | 330        |
| 215 | Tyr   | Ser      | Tyr              | Leu  | Thr        | Gln  | Gly     | Gly      | Asp  | Ser | Arg   | Ile   | Pro         | Gly        | Val        |
| 216 |       |          |                  |      | 335        |      |         |          |      | 340 |       |       |             |            | 345        |
| 217 | Asp   | Asp      | Lys              | Ala  | Asp        | Phe  | Glu     | Ala      | Leu  | Leu | Lys   | Ala   | Leu         | Gln        | Leu        |
| 218 |       |          |                  |      | 350        |      |         |          |      | 355 |       |       |             |            | 360        |
| 219 | Leu   | Gly      | Phe              | Asp  | Glu        | Lys  | Gln     | Met      | Ser  | Asp | Val   | Phe   | Arg         | Leu        | Leu        |
| 220 |       |          |                  |      | 365        |      | ,       |          |      | 370 |       |       |             |            | 375        |
|     | Ala   | Gly      | Leu              | Leu  | Leu        | Leu  | Gly     | Asn      | Val  |     | Phe   | Glu   | Asn         | Gly        |            |
| 222 |       |          |                  |      | 380        |      |         |          |      | 385 |       |       |             |            | 390        |
|     | Gly   | Ser      | Ser              | Ala  | Val        | Ser  | Ala     | Ser      | Ser  |     | Gln   | Glu   | Ile         | Ser        |            |
| 224 |       |          |                  |      | 395        |      |         |          |      | 400 |       |       |             |            | 405        |
|     | Leu   | Cys      | Arg              | Glu  | Phe        | Trp  | Lys     | Ile      | Ser  |     | Ser   | Asp   | Leu         | Arg        |            |
| 226 |       |          |                  |      | 410        |      |         | _        |      | 415 | _     |       |             |            | 420        |
|     | Trp   | Leu      | Thr              | Arg  | Arg        | Glu  | Ile     | Arg      | Ala  |     | Asn   | GLu   | He          | Val        |            |
| 228 | _     | _        | _                |      | 425        | _    |         |          |      | 430 | _     | _     | _           | <b>.</b> . | 435        |
|     | Lys   | Pro      | Leu              | Thr  | Lys        | Asn  | Glu     | Ата      | Val  |     | Ser   | Arg   | Asp         | Ата        |            |
| 230 | ml    | <b>.</b> | <b>N</b> ( - 1 - | T    | 440        | G    | 11.5 -  | Ŧ        | D1   | 445 | m     | T     | 17-1        | 7          | 450        |
|     | Thr   | гàг      | мет              | Leu  | Tyr        | Ser  | HIS     | ьeu      | Pne  |     | тгр   | ьeu   | vaı         | Asp        | ьуs<br>465 |
| 232 | Tla   | 7 ~ ~    | C1               | 71.  | 455        | 7000 | C1      | T        | 7.00 | 460 | T 011 | 7.00  | C1          | Thr        |            |
| 233 | тте   | ASII     | GIU              | Ala  | Leu<br>470 | ASII | GIU     | гу       | Asp  | 475 | ьeu   | Asp   | <u>ат</u> у | 1111       | 480        |
|     | Cln   | Lvc      | Tuc              | Λrα  | Pro        | Aen  | Ara     | Pho      | Tla  |     | Val   | T.011 | Asn         | T۱۵        |            |
| 236 | GIII  | цуз      | цуз              | ALY  | 485        | изр  | Arg     | 1110     | 116  | 490 | Val   | пси   | тэр         | 110        | 495        |
|     | Glv   | Phe      | Glu              | Thr  | Phe        | Asn  | Va 1    | Asn      | Ser  |     | Glu   | Gln   | Phe         | Ser        |            |
| 238 | O ± y | 1110     | O.L.u            | 1111 | 500        | p    | • • • • |          | 501  | 505 | 010   | 0111  |             | 202        | 510        |
|     | Asn   | Tvr      | Ala              | Asn  | Glu        | Lvs  | Len     | Gln      | Gln  |     | Phe   | Asn   | Gln         | His        |            |
| 240 | 11011 | - 1 -    |                  |      | 515        | 10   | 204     | <b>V</b> |      | 520 |       |       |             |            | 525        |
|     | Phe   | Lvs      | Leu              | Glu  | Gln        | Glu  | Glu     | Tvr      | Ile  |     | Glu   | Glu   | Ile         | Glu        | Trp        |
| 242 |       | 2        |                  |      | 530        |      |         | _        |      | 535 |       |       |             |            | 540        |
|     | Val   | Arq      | Val              | Asp  | Phe        | His  | Asp     | Asn      | Gln  | Pro | Ala   | Ile   | Asp         | Leu        | Ile        |
| 244 |       | _        |                  | •    | 545        |      | •       |          |      | 550 |       |       | -           |            | 555        |
| 245 | Glu   | Gly      | Pro              | Val  | Gly        | Met  | Ile     | Asn      | Leu  | Leu | Asp   | Glu   | Gln         | Cys        | Lys        |
| 246 |       | -        |                  |      | 560        |      |         |          |      | 565 | _     |       |             | _          | 570        |
| 247 | Arg   | Leu      | Asn              | Gly  | Ser        | Asp  | Ala     | Asp      | Trp  | Leu | Ser   | Gln   | Leu         | Gln        | Asn        |
| 248 | -     |          |                  | _    | 575        | _    |         |          |      | 580 |       |       |             |            | 585        |
| 249 | Ser   | Thr      | Glu              | Leu  | Lys        | Arg  | Asn     | Pro      | Gln  | Leu | Ala   | Phe   | Pro         | Lys        | Val        |
| 250 |       |          |                  |      | 590        |      |         |          |      | 595 |       |       |             |            | 600        |
| 251 | Arg   | Ser      | Asn              | Asp  | Phe        | Ile  | Val     | Arg      | His  | Phe | Ala   | Ala   | Asp         | Val        | Thr        |
| 252 |       |          |                  |      | 605        |      |         |          |      | 610 |       |       |             |            | 615        |
|     | Tyr   | Ser      | Thr              | Asp  | Gly        | Phe  | Val     | Glu      | Lys  |     | Arg   | Asp   | Ala         | Ile        |            |
| 254 |       |          |                  |      | 620        |      |         |          |      | 625 |       |       |             |            | 630        |
|     |       |          |                  |      |            |      |         |          |      |     |       |       |             |            |            |

VERIFICATION SUMMARY

DATE: 02/11/2003

PATENT APPLICATION: US/09/830,914C

TIME: 14:29:18

Input Set : A:\pf0621usn\_subseqlist.txt
Output Set: N:\CRF4\02112003\1830914C.raw

L:10 M:271 C: Current Filing Date differs, Replaced Current Filing Date